FAX TRANSMISSION

DATE: February 28, 2007

PTO IDENTIFIER: **Application Number** 10/524,079-Conf. #4214
Patent Number
Inventor: Nobuo KIMIZUKA et al.

MESSAGE TO: Attn: Donna Green, MS PCT, Commissioner for Patents, US Patent and Trademark Office
FAX NUMBER: (571) 273-3201

FROM: LAHIVE & COCKFIELD, LLP
Anthony A. Laurentano
PHONE: (617) 227-7400
Attorney Dkt. #: TAW-012US

PAGES (Including Cover Sheet): 14

CONTENTS:
Second Request for Corrected Filing Receipt (2 pages)
Copy of Corrected Filing Receipt with correction noted thereon (3 pages)
Courtesy Copy of First Preliminary Amendment (7 pages)
Certificate of Transmission (1 page)

If your receipt of this transmission is in error, please notify this firm immediately by collect call to sender at (617) 227-7400 and send the original transmission to us by return mail at the address below.

LAHIVE & COCKFIELD, LLP
One Post Office Square, Boston, Massachusetts 02109-2127
Telephone: (617) 227-7400 **Facsimile:** (617) 742-4214

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted by facsimile to the Patent and Trademark Office, facsimile no. (571) 273-3201 to Donna Green, MS PCT at Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.
Dated: February 28, 2007 Signature:

Docket No.: TAW-012US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Nobuo Kimizuka *et al.*

Application No.: 10/524,079 Confirmation No.: 4214

Filed: October 31, 2005 Art Unit: 1756

For: MOLECULAR-ORIENTED POLYMER GEL AND CAST FILM WITH SELF-ORGANIZABLE AMPHIPHILIC COMPOUND AS TEMPLATE, AND THEIR PRODUCTION METHODS

Examiner: S. C. Wu

SECOND REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Attn: Donna Green, MS PCT

Dear Sir:

Applicant hereby requests that a second Corrected Filing Receipt be issued in the above-identified patent application. The Corrected Filing Receipt received by Applicant, in response to a Request for Correction in title, filed on October 5, 2006, a copy of which is attached hereto, has a data entry error in the title. The word *templated* should be **template**. Please remove the ending d. The title should read as follows:

MOLECULAR-ORIENTED POLYMER GEL AND CAST FILM WITH SELF-ORGANIZABLE AMPHIPHILIC COMPOUND AS **TEMPLATE**, AND THEIR PRODUCTION METHODS

Enclosed is a courtesy copy of the First Preliminary Amendment filed with the '371 application on February 5, 2005.

Applicant additionally requests that all pertinent U.S. Patent and Trademark Office records relating to the subject application be changed to reflect this correction.

Application No.: 10/524,079 Docket No.: TAW-012US

Dated: February 28, 2007

Respectfully submitted,

By _____
Anthony A. Laurentano
Registration No.: 38,220
LAHIVE & COCKFIELD, LLP
One Post Office Square
Boston, Massachusetts 02109-2127
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/524,079	10/31/2005	1756	1480	~~TAWI-012~~US	7	21	5

CONFIRMATION NO. 4214

959
LAHIVE & COCKFIELD, LLP
ONE POST OFFICE SQUARE
BOSTON, MA 02109-2127

CORRECTED FILING RECEIPT

OC000000021883621

ENTERED

Date Mailed: 01/12/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

Nobuo Kimizuka, Fukuoka-shi, JAPAN;
Kazuhiro Kagawa, Wako-shi, JAPAN;
Takuya Nakashima, Ikoma-shi, JAPAN;

Assignment For Published Patent Application

Honda Giken Kogyo Kabushiki Kaisha, Tokyo, JAPAN
Nobuo Kimizuka, Fukuoka-shi, JAPAN

Power of Attorney: The patent practitioners associated with Customer Number **00959**.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP03/10068 08/07/2003

Foreign Applications

JAPAN 2002-231958 08/08/2002
JAPAN 2003-013943 01/22/2003

If Required, Foreign Filing License Granted: 01/12/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/524,079

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

Title

Molecular oriented polymer gel and cast film with self-organizable amphiphilic compound as template, and their production methods

Preliminary Class

252

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING

LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 466 142 230 US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 8 February 2005 Signature: (Anthony A. Laurentano)

Docket No.: TAW-012US (PATENT)

IN THE UNITED STATES PATENT OFFICE AS DESIGNATED OFFICE (DO/US)

In re Patent Application of:
Nobuo Kimizuka *et al.*
International Application No.: PCT/JP2003/010068

International Filing Date: 7 August 2003

Application No.: NEW APPLICATION Art Unit: N/A

Filed: Concurrently Herewith Examiner: Not Yet Assigned

For: MOLECULAR-ORIENTED POLYMER GEL AND CAST FILM WITH SELF-ORGANIZABLE AMPHIPHILIC COMPOUND AS TEMPLATE, AND THEIR PRODUCTION METHODS **(as amended)**

FIRST PRELIMINARY AMENDMENT

MS PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

Prior to examination on the merits, please amend the above-identified U.S. patent application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 7 of this paper.

Application No.: NEW APPLICATION Docket No.: TAW-012US

AMENDMENTS TO THE SPECIFICATION

In addition to the Article 34 Amendments submitted by the Applicants during the prosecution of the corresponding international patent application, we further amend the specification as follows:

In the Specification:

Please amend the title as follows:

~~MOLECULE ALIGNMENT POLYMER GEL AND MOLECULE ALIGNMENT POLYMER CAST FILM HAVING SELF-ORGANIZING AMPHIPHILIC COMPOUND AS TEMPLATE AND PROCESS FOR PRODUCING THE SAME~~

MOLECULAR ORIENTED POLYMER GEL AND CAST FILM WITH SELF-ORGANIZABLE AMPHIPHILIC COMPOUND AS TEMPLATE, AND THEIR PRODUCTION METHODS

Page 1, line 2, after the title, please insert the following new paragraph:

Related Applications

This application is a 35 U.S.C. 371 national stage filing of International Application No. PCT/JP2003/010068, filed 7 August 2003, which claims priority to Japanese Patent Application No. 2002-231958 filed on 8 August 2002 and Japanese Patent Application No. 2003-013943 filed 22 January 2003 in Japan. The contents of the aforementioned applications are hereby incorporated by reference.

Application No.: NEW APPLICATION Docket No.: TAW-012US

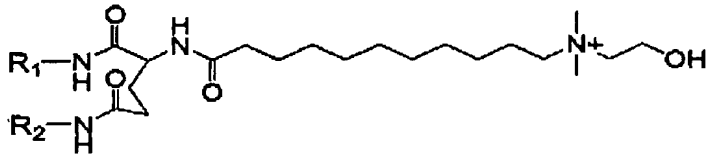
AMENDMENTS TO THE CLAIMS

In addition to the Article 34 Amendments submitted by the Applicants during the prosecution of the corresponding international patent application, we further amend the claims as follows:

1. (previously presented) A molecular-oriented polymer gel obtained by self-assembly of a self-organizable amphiphilic compound and a monomer interacting with said amphiphilic compound, and then polymerizing said monomer, said monomer being thiophene and/or its derivative, pyrrole and/or its derivative, or 2-acrylamide-2-methylpropanesulfonic acid.

2. (original) The molecular-oriented polymer gel according to claim 1, wherein said amphiphilic compound is a cation comprising a linear or branched alkyl group having 20 or less carbon atoms.

3. (previously presented) A molecular-oriented polymer gel obtained by self-assembly of a self-organizable amphiphilic compound and a monomer interacting with said amphiphilic compound, and then polymerizing said monomer, said amphiphilic compound being represented by the following general formula (I):



... (I),

wherein R_1 and R_2 represent linear or branched alkyl groups having 20 or less carbon atoms, which may be the same or different.

4. (previously presented) The molecular-oriented polymer gel according to claim 3, wherein said monomer is thiophene and/or its derivative, pyrrole and/or its derivative, or 2-acrylamide-2-methylpropanesulfonic acid, or another anionic monomer than said thiophene derivative and said pyrrole derivative.

5. (original) The molecular-oriented polymer gel according to claim 4, wherein said anionic monomer comprises a sulfonic group.

6. (original) The molecular-oriented polymer gel according to claim 5, wherein said anionic monomer is 2-acrylamide-2-methylpropanesulfonic acid.

7. (currently amended) The molecular-oriented polymer gel according to claim 2~~any one of claims 2 to 6~~, wherein the linear or branched alkyl group of said amphiphilic compound has 10 or less carbon atoms.

8. (Canceled)

9. (currently amended) The molecular-oriented polymer gel according to claim 4~~any one of claims 1, 2, 4 and 7~~,wherein said thiophene derivative is at least one selected from the group consisting of 3-thiophencarboxylic acid, 3-thiophenacetic acid, 3-thiophene ethanol, 3,4-ethylenedioxythiophene and bis(thiophene), and wherein said pyrrole derivative is 3-pyrrolecarboxylic acid or 3-pyrroleacetic acid.

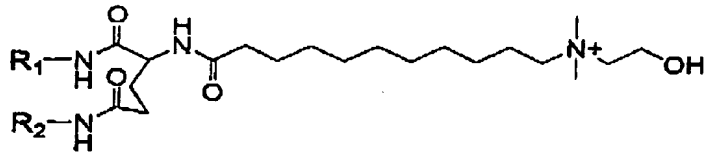
10. (previously presented) A molecular-oriented polymer cast film obtained by casting a solution of a self-organizable amphiphilic compound and a monomer interacting with said amphiphilic compound, and then polymerizing said monomer, said monomer being thiophene and/or its derivative, pyrrole and/or its derivative, or 2-acrylamide-2-methylpropanesulfonic acid.

11. (original) A molecular-oriented polymer cast film obtained by casting a solution of a self-organizable amphiphilic compound on an electrode, and then supplying current to said electrode in a solution containing a monomer which is thiophene and/or its derivative, or a monomer which is pyrrole and/or its derivative, to electrolytically polymerize said monomer.

12. (currently amended) The molecular-oriented polymer cast film according to claim ~~10 or~~ 11, wherein said amphiphilic compound is a cation comprising a linear or branched alkyl group having 20 or less carbon atoms.

Application No.: NEW APPLICATION Docket No.: TAW-012US

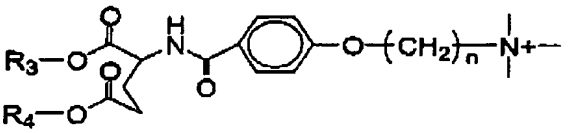
13. (previously presented) A molecular-oriented polymer cast film obtained by casting a solution of a self-organizable amphiphilic compound and a monomer interacting with said amphiphilic compound, and then polymerizing said monomer, said amphiphilic compound being represented by the following general formula (I):



... (I),

wherein R_1 and R_2 represent linear or branched alkyl groups having 20 or less carbon atoms, which may be the same or different.

14. (original) The molecular-oriented polymer cast film according to claim 12, wherein said cation is represented by the following general formula (II):



... (II),

wherein R_3 and R_4 represent linear or branched alkyl groups having 20 or less carbon atoms, which may be the same or different, and n is an integer of 2 to 12.

15. (previously presented) The molecular-oriented polymer cast film according to claim 13, wherein said monomer is thiophene and/or its derivative, pyrrole and/or its derivative, or another anionic monomer than said thiophene derivative and said pyrrole derivative.

16. (previously presented) The molecular-oriented polymer cast film according to claim 15, wherein said anionic monomer other than said thiophene derivative and pyrrole derivative is 2-acrylamide-2-methylpropanesulfonic acid.

Application No.: NEW APPLICATION Docket No.: TAW-012US

17. (currently amended) The molecular-oriented polymer cast film according to claim 15~~any one of claims 10 to 12, 14 and 15~~, wherein said thiophene derivative is at least one selected from the group consisting of 3-thiophencarboxylic acid, 3-thiophenacetic acid, 3-thiophene ethanol, 3,4-ethylenedioxythiophene and bis(thiophene), and wherein said pyrrole derivative is 3-pyrrolecarboxylic acid or 3-pyrroleacetic acid.

18. (currently amended) A method for producing the molecular-oriented polymer gel recited in claim 1~~any one of claims 1 to 7 and 9~~, comprising the steps of mixing said amphiphilic compound and said monomer to self-organize them, and then polymerizing said monomer.

19. (original) The method for producing a molecular-oriented polymer gel according to claim 18, wherein the polymerization reaction of said monomer is carried out at a temperature lower than a phase transition temperature of a self-organized-to-molecular-level body of said amphiphilic compound and said monomer.

20. (currently amended) A method for producing the molecular-oriented polymer cast film recited in claim 10~~any one of claims 10 to 17~~, comprising the steps of preparing a solution of said amphiphilic compound and said monomer, casting said solution, and then polymerizing said monomer.

21. (currently amended) A method for producing the molecular-oriented polymer cast film recited in claim 10~~any one of claims 10 to 17~~, comprising the steps of preparing a solution of said amphiphilic compound, casting said solution on an electrode, dried said solution to form a film of said amphiphilic compound, immersing said film in a solution comprising said monomer, and supplying current to said electrode to electrolytically polymerize said monomer.

22. (currently amended) The method for producing a molecular-oriented polymer cast film according to claim 20~~or 21~~, wherein the polymerization reaction of said monomer is carried out at a temperature lower than a phase transition temperature of a self-organized-to-molecular-level body of said amphiphilic compound and said monomer.

Application No.: NEW APPLICATION Docket No.: TAW-012US

REMARKS

Preliminary to examination of this application, please amend the specification and amend claims 7, 9, 12, 17, 18, and 20-22 as set forth above. Applicants amend the claims to remove multiple dependencies, to provide proper antecedent basis, and to address other matters of form. The foregoing amendments are not related to issues of patentability. Support for the amendments to the claims can be found throughout the specification, Figures and claims as originally filed.

Applicant respectfully submits that the foregoing amendments introduce no new matter. Entry of the foregoing Preliminary Amendment is in order and requested.

If there are any questions regarding the proposed amendments to the application, we invite the Examiner to call Applicants' representative at the telephone number below.

Applicant believes no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. TAW-012US from which the undersigned is authorized to draw

Dated: 8 February 2005

Respectfully submitted,

By _____

Anthony A. Laurentano
Registration No.: 38,220
LAHIVE & COCKFIELD, LLP
28 State Street
Boston, Massachusetts 02109
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant

PTO/SB/97 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Application No.:10/524,079 Attorney Docket No.: TAW-012US

Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office.

on February 28, 2007 .
Date

Signature

Anthony A. Laurentano
Typed or printed name of person signing Certificate

38,220
Registration Number, if applicable

(617) 227-7400
Telephone Number

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

Second Request for Corrected Filing Receipt (2 pages)
Copy of Corrected Filing Receipt with correction noted thereon (3 pages)
Courtesy Copy of First Preliminary Amendment (7 pages)
Certificate of Transmission (1 page)